Midterm Presentation

"Mail AI"

AI-based Mail Assistant

Team E: Yosep Kim, Dohyeon Boo, Sumin Lim, Miseo Jeong

Agenda

01

Introduction & Team Role

1.1 Objective

1.2 Milestone

1.3 Roles of Each Member

02

Design & Implementions

2.1 Design: UX/UI

2.2 AI Model

2.3 Implementation

03

Challenges & Limitaions

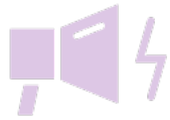
3.1 FE + BE

3.2 UI/UX + FE

3.3 DB & Auth

3.4 SSL/TLS & Proxy

04



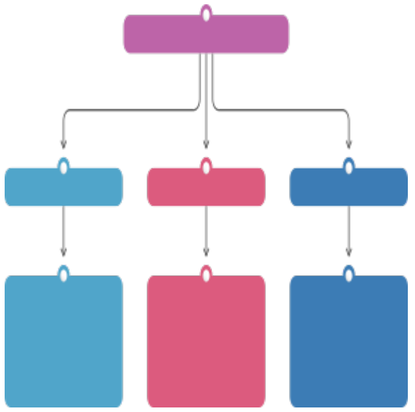
Further Mileston & Conclusion

4.1 Further Milestone

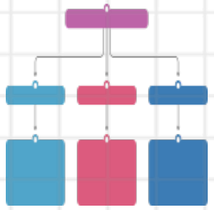
4.2 Conclusion

4.3 Q&A

01 Introduction & Team Role

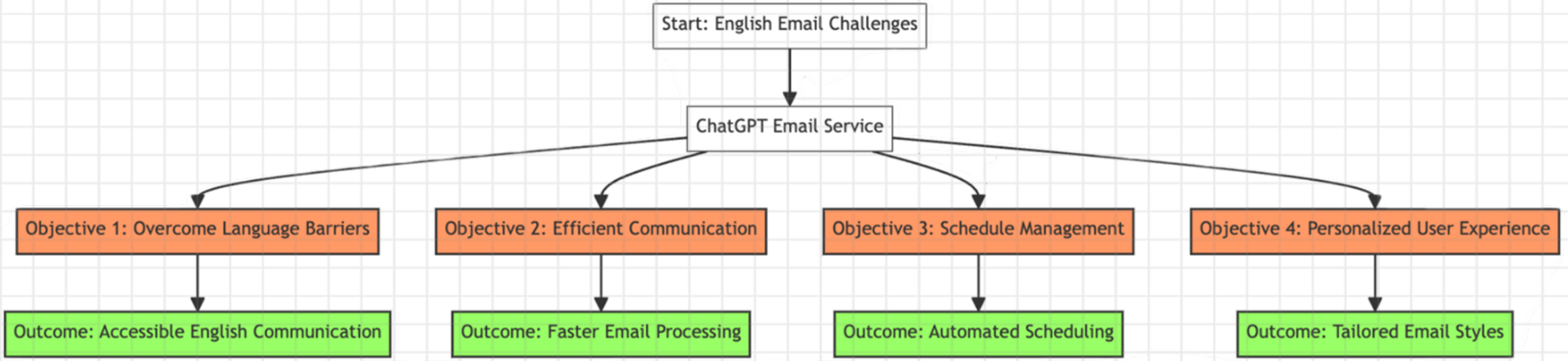


1.1 Objectives
1.2 Milestone
1.3 Role of Each Member



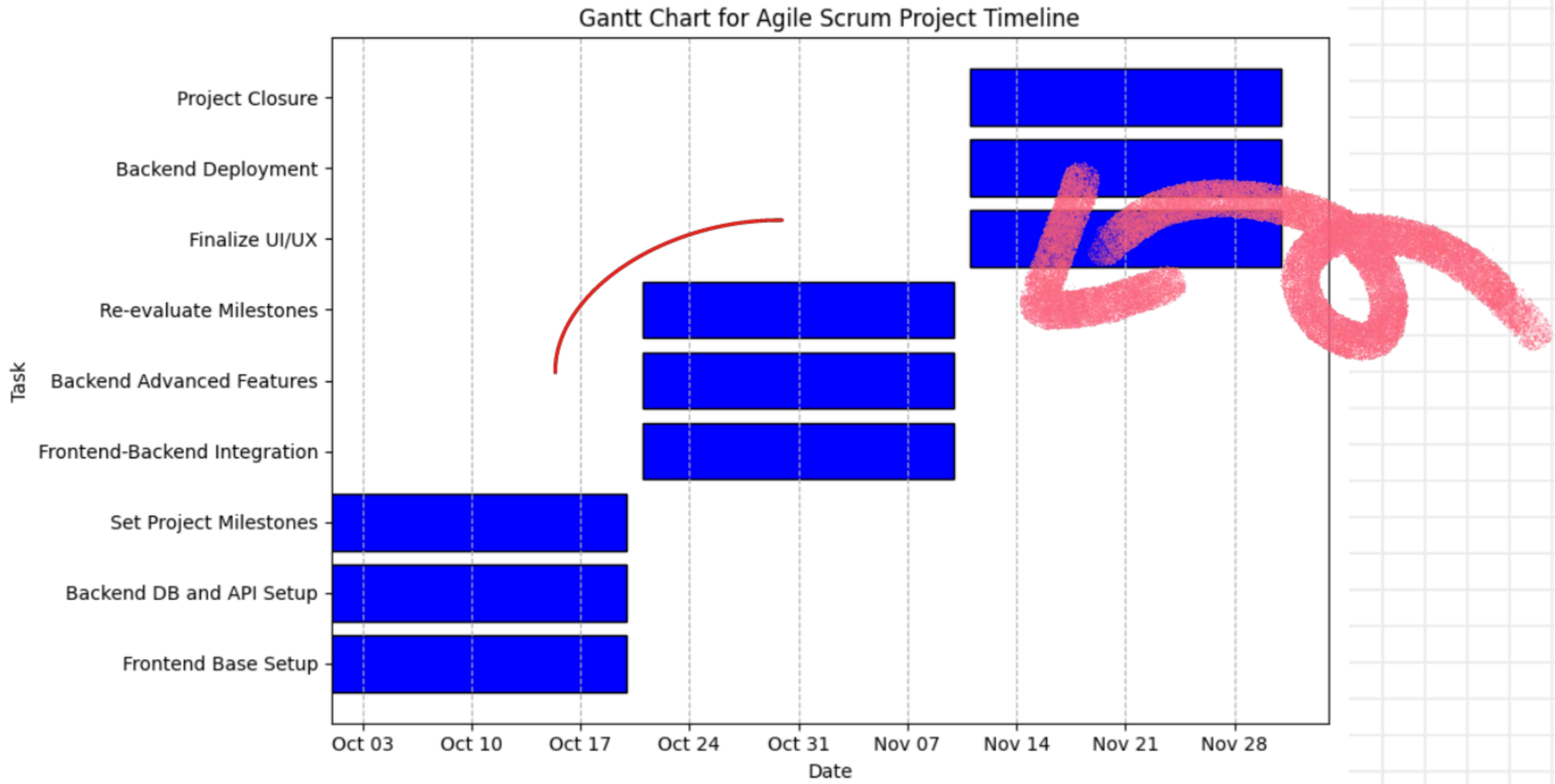
01 Introduction & Team Role

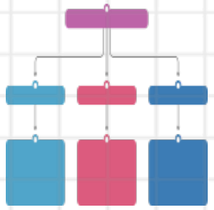
1.1 Objectives



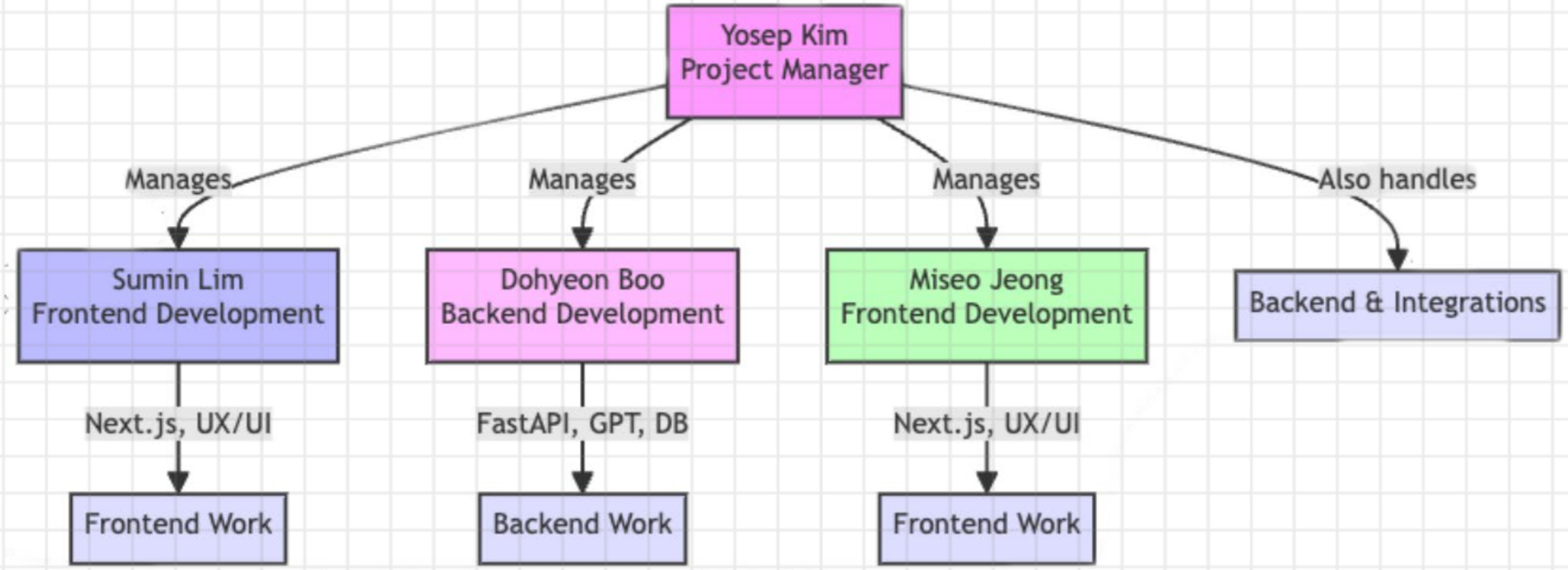
01 Introduction & Team Role

1.2 Milestone





1.3 Roles of Each Member

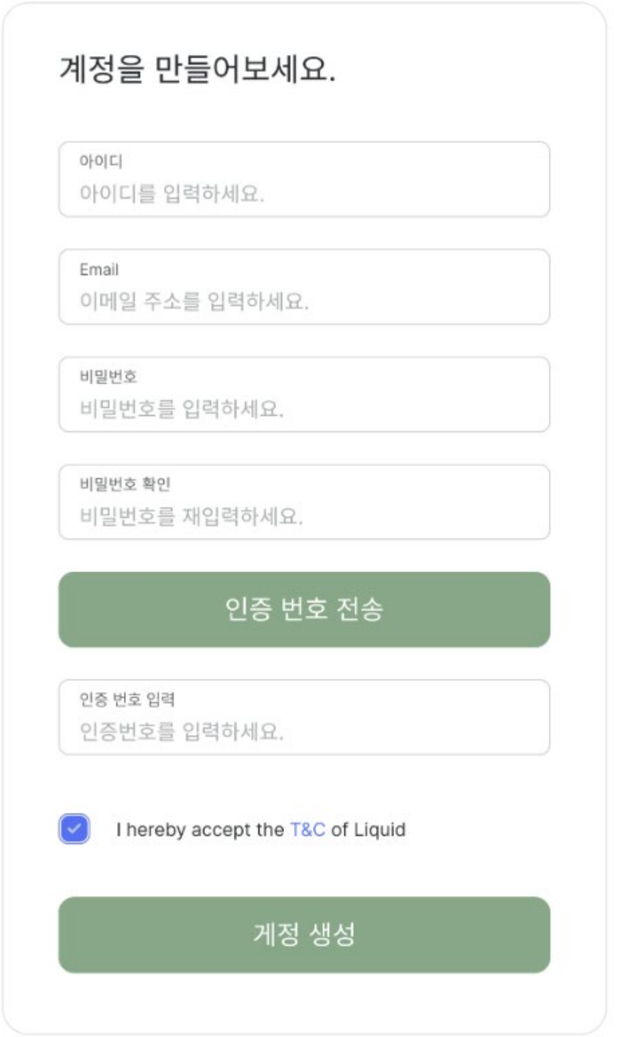


02 Design & Implementation

2.1 Design: UX/UI
2.2 AI Model
2.3 Implementation

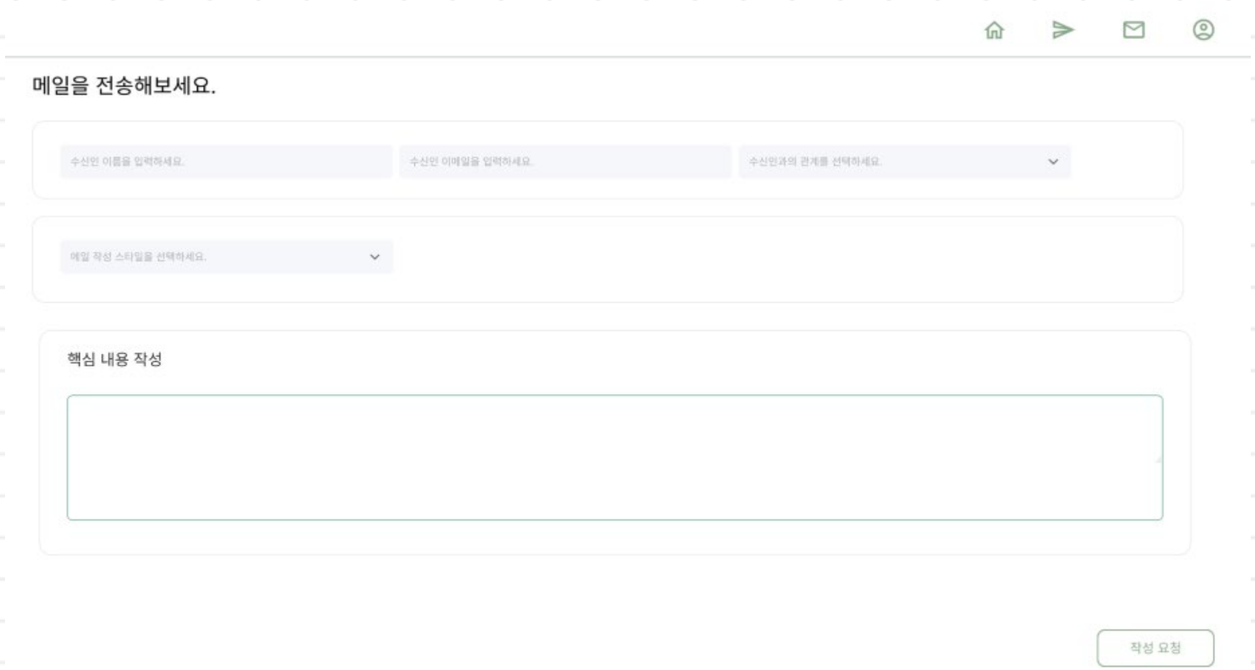
02 Design & Implementation

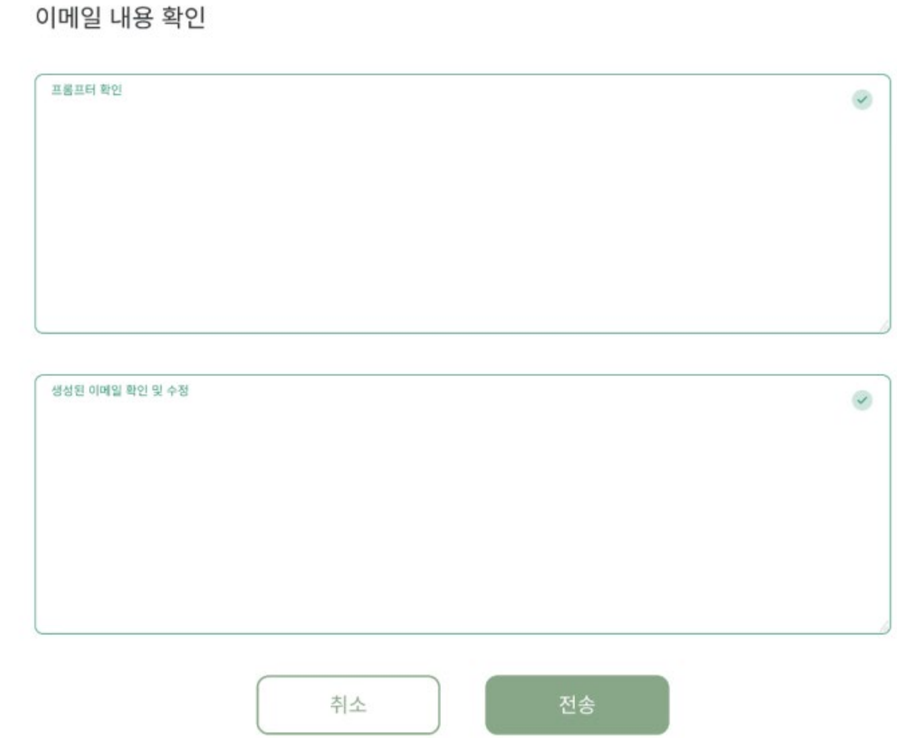
2.1 Design: UX/UI



02 Design & Implementation

2.1 Design: UX/UI





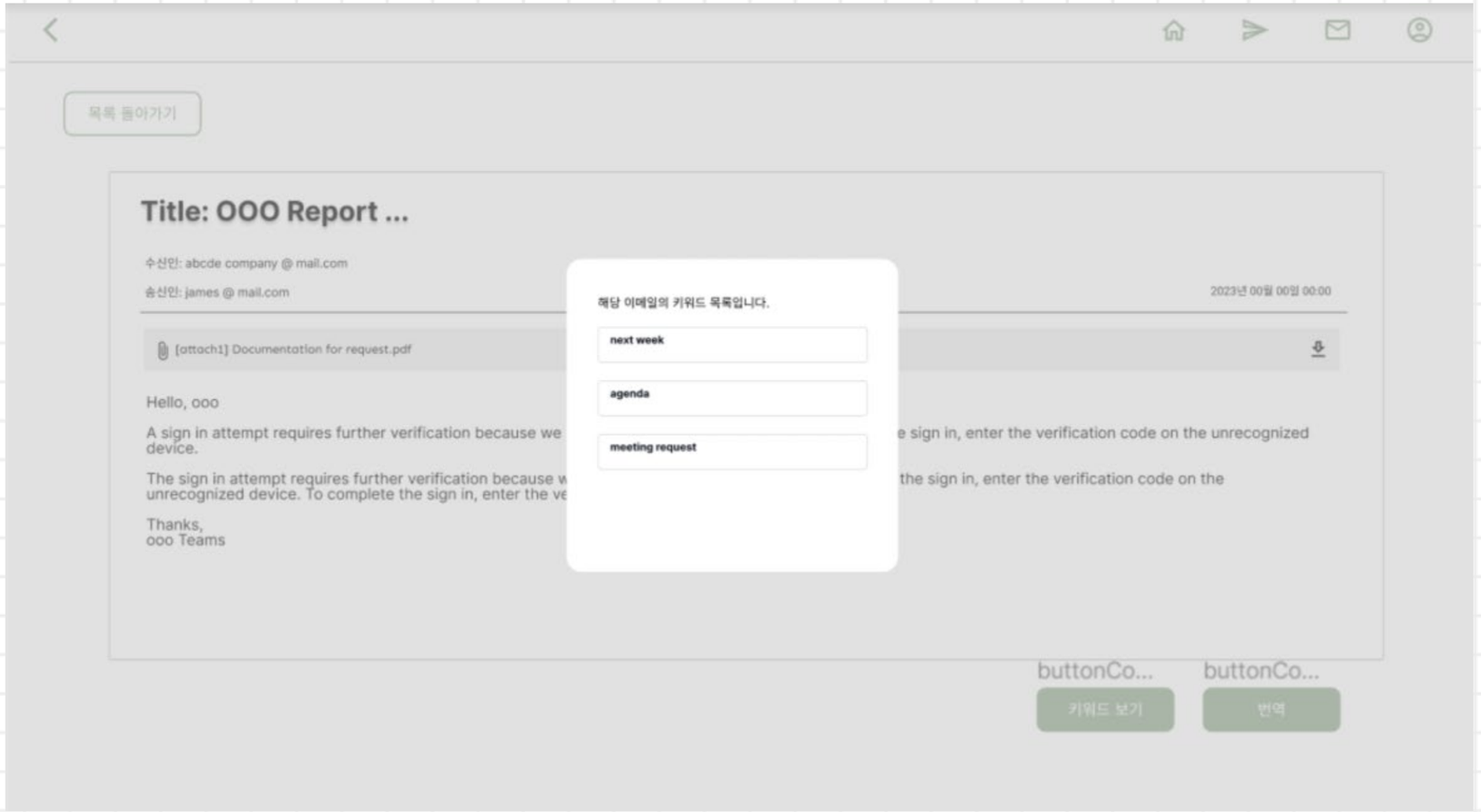
02 Design & Implementation

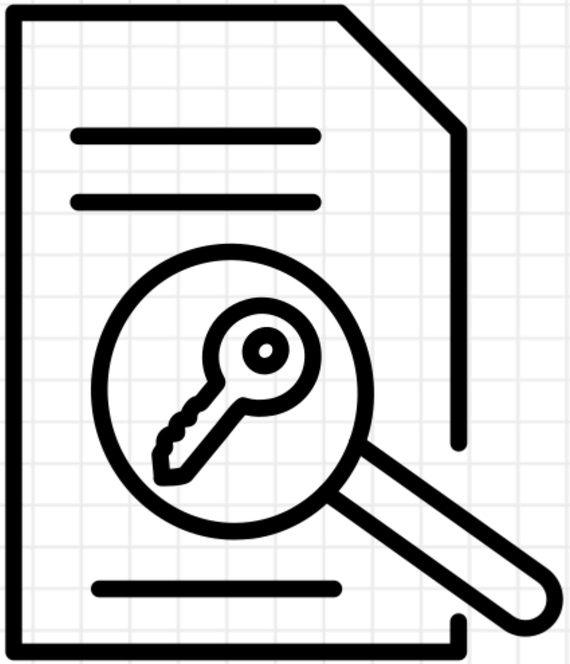
2.1 Design: UX/UI

02 Design & Implementation

2.1 Design: UX/UI

Each Email

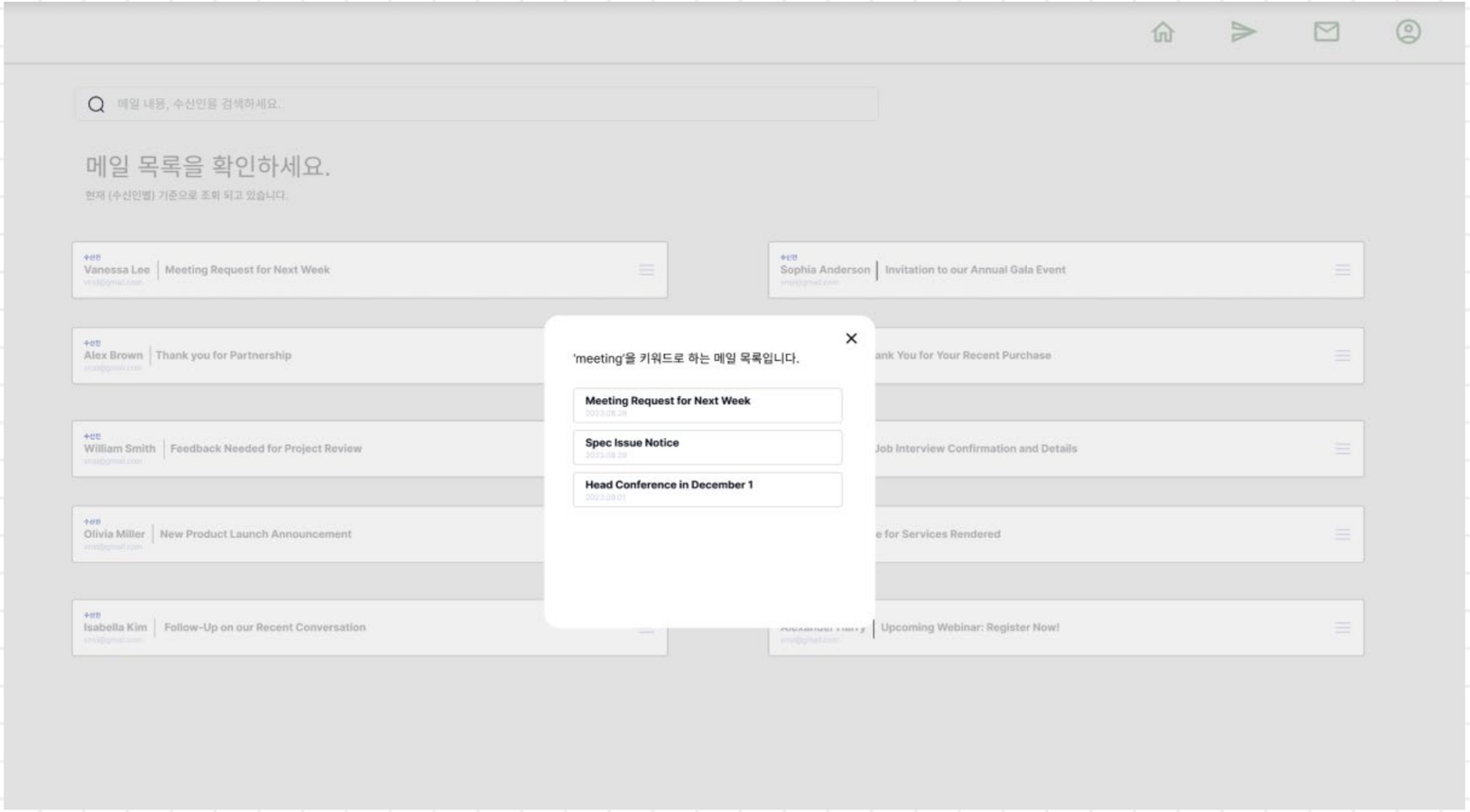


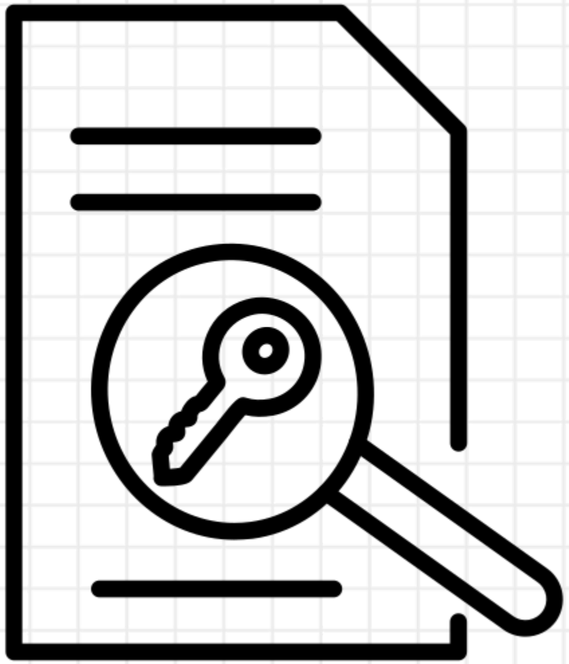


02 Design & Implementation

2.1 Design: UX/UI

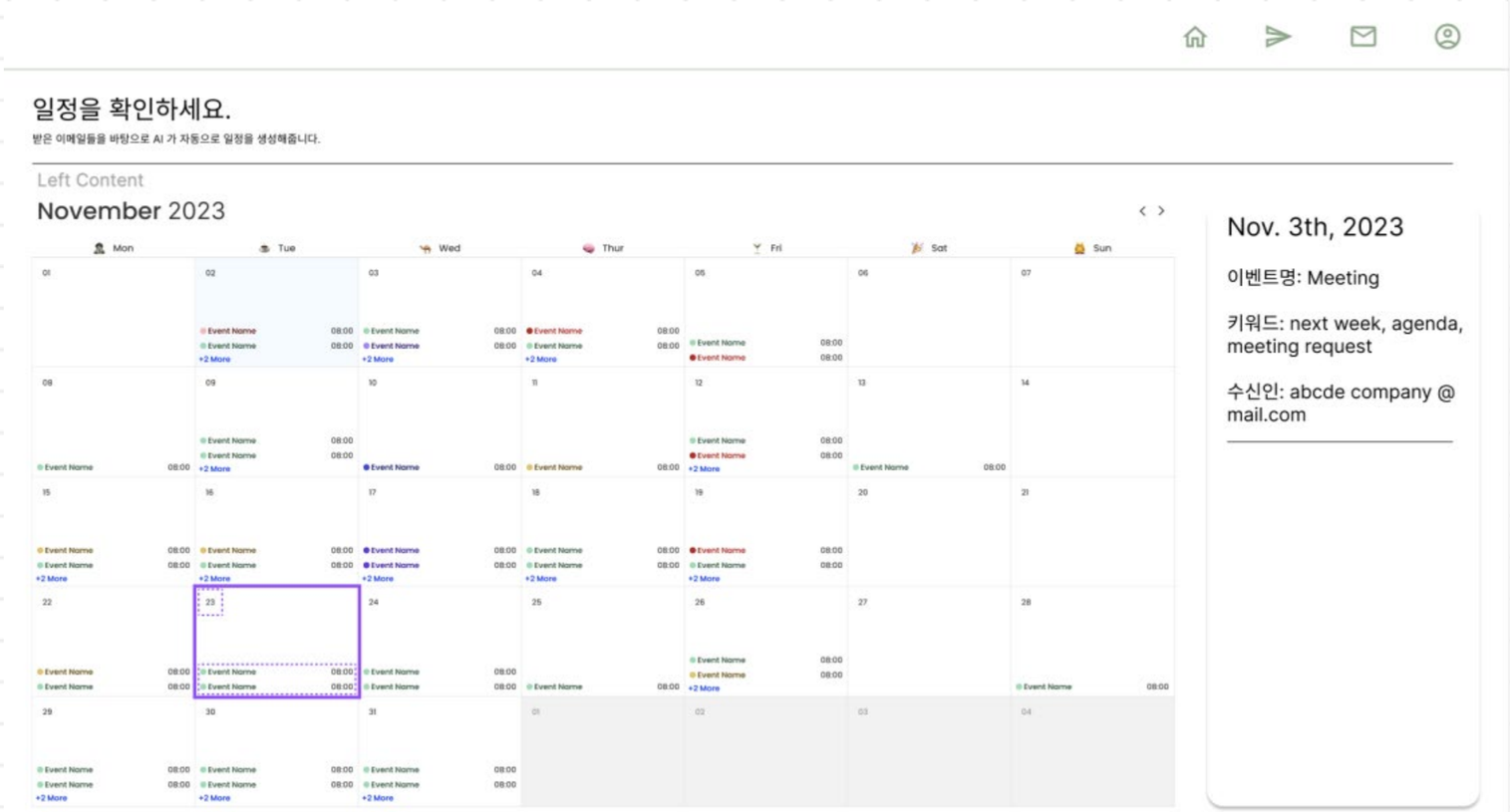
Email List

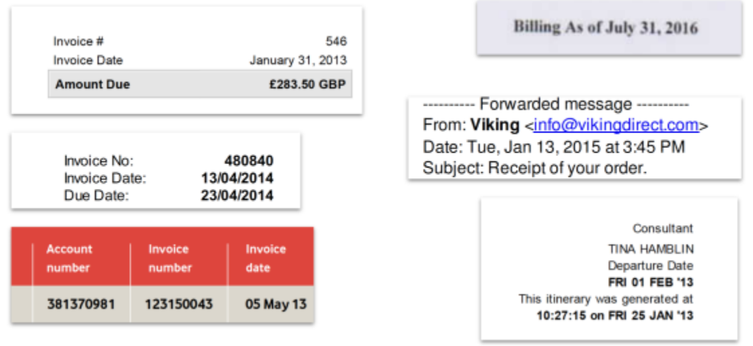


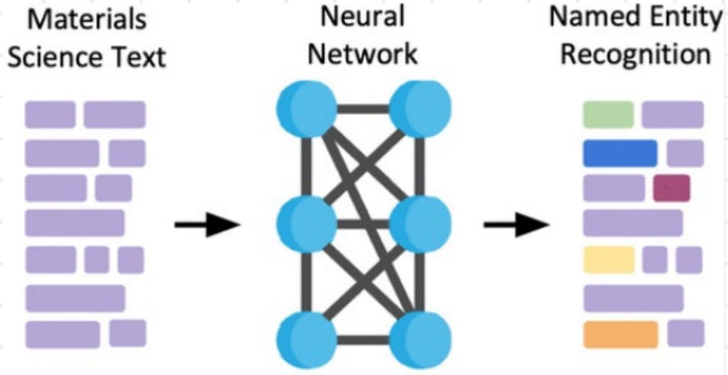


02 Design & Implementation

2.1 Design: UX/UI Auto Scheduler





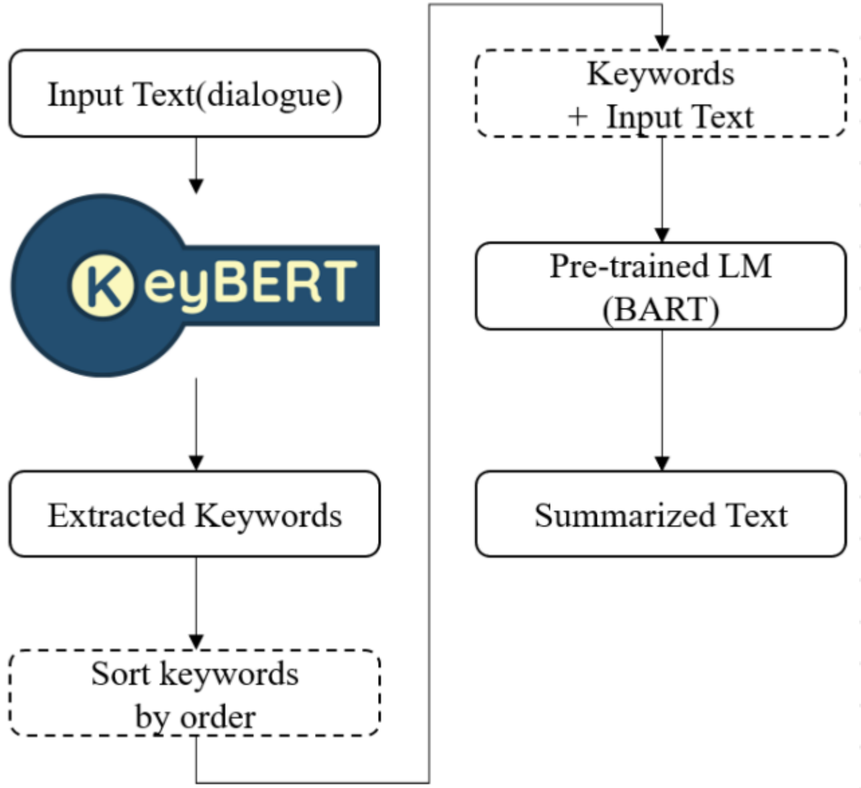


02 Design & Implementation

2.2 AI Model

Keybert: Keyword Extraction

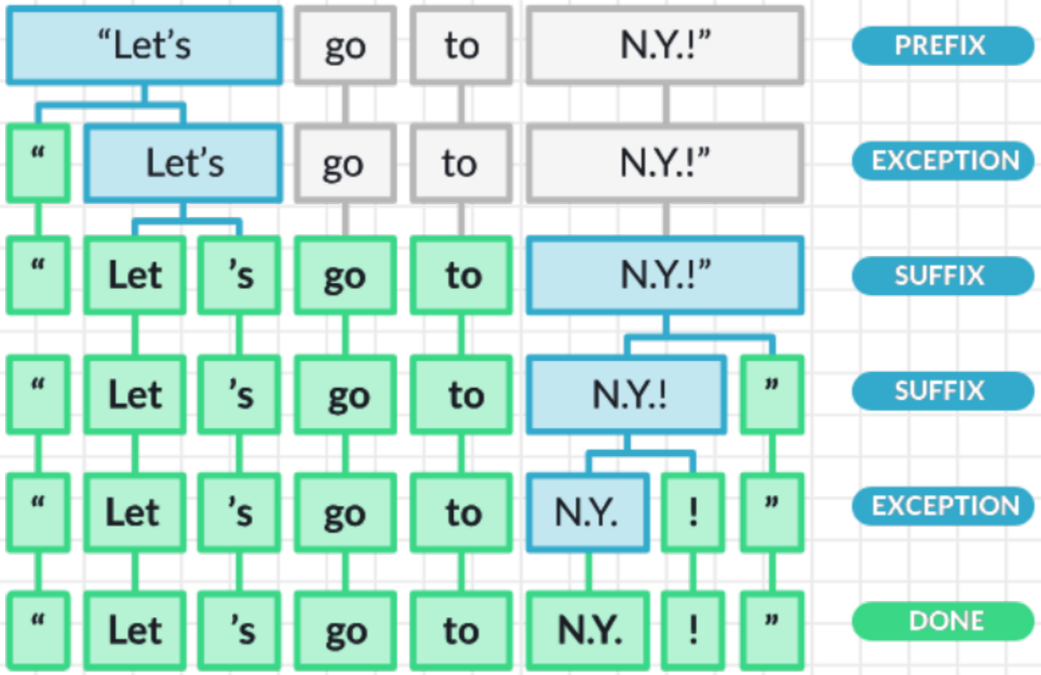
```python
from keybert import KeyBERT

email_content = """
Subject: Meeting Schedule Confirmation
...
"""

kw_model = KeyBERT()
keywords = kw_model.extract_keywords(
    email_content, keyphrase_ngram_range=(2, 4), use_maxsum=True, top_n=5
)

print(keywords)
# Output
[('productive meeting questions concerns', 0.5441), ...]
```



02 Design & Implementation

2.2 AI Model

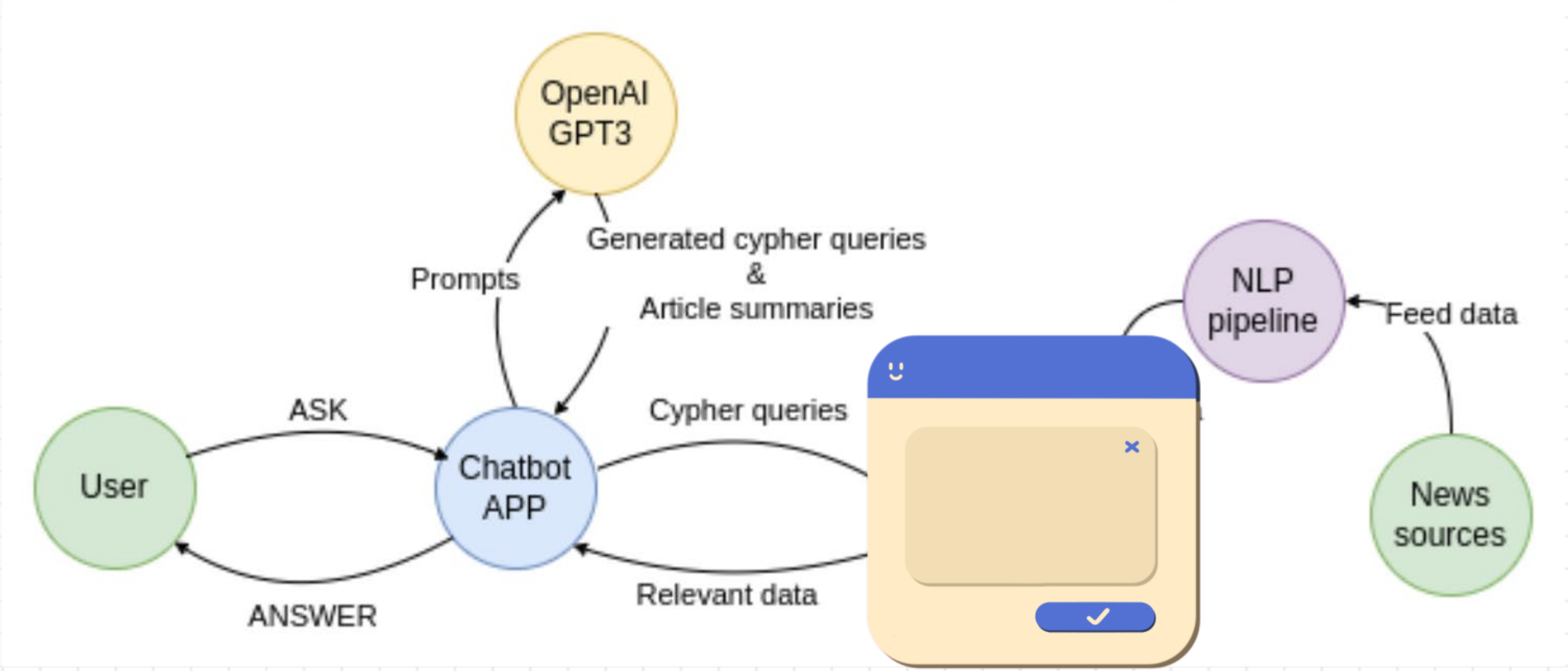
Spacy: Date & Time Extraction




```
# Email content
Subject: Meeting Schedule Confirmation
...

# spaCy code
import spacy
from spacy.matcher import Matcher
...

nlp = spacy.load("en_core_web_sm")
...

@Language.component("custom_date_component")
def custom_date_component(doc):
    ...

nlp.add_pipe("custom_date_component", before="parser")

text = """
Subject: Meeting Schedule Confirmation
...
"""
doc = nlp(text)
for ent in doc.ents:
    if ent.label_ == "DATE":
        print("Date:", ent.text)

# Parsing to a Date object
from datetime import datetime
date_string = "Monday, November 18th, 2021"
date_object = datetime.strptime(date_string, "%A, %B %dth, %Y").date()
```

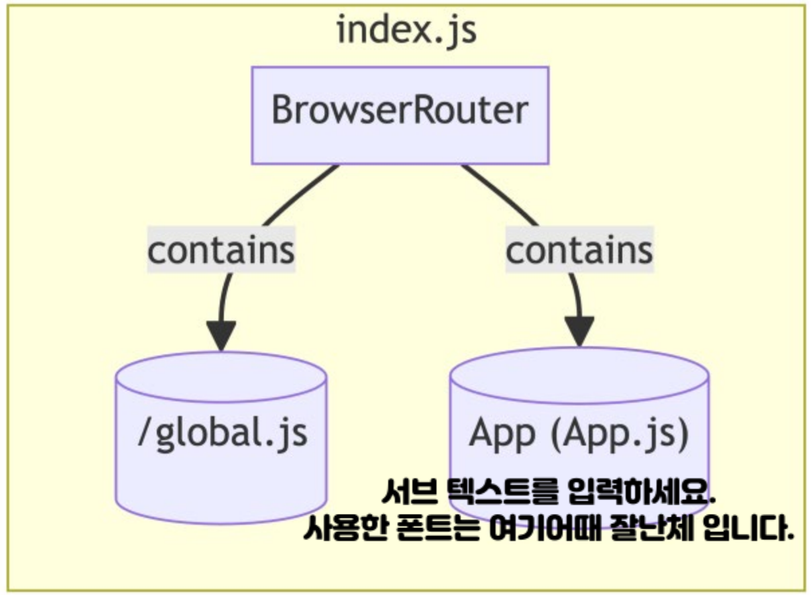
02 Design & Implementation

2.2 AI Model

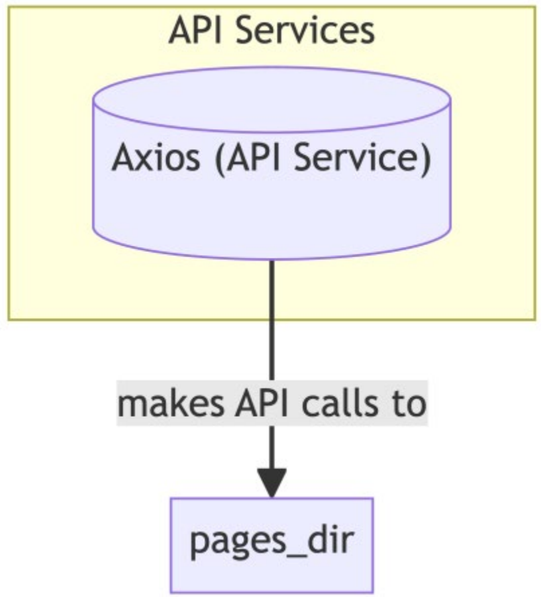


2.3 Implementation Front End

Index and App



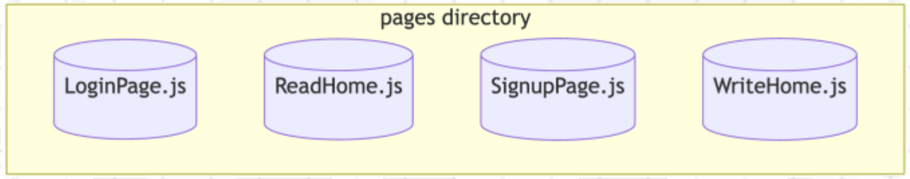
Axios Routing



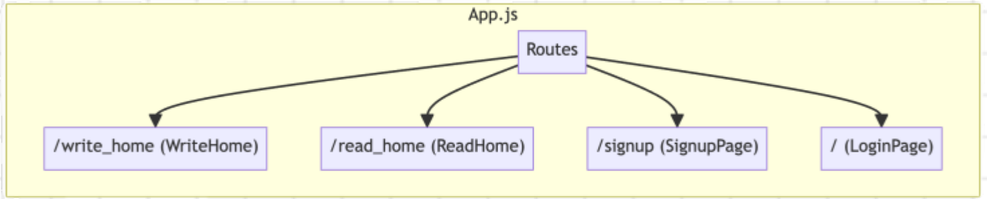
02 Design & Implementation

2.3 Implementation Front End

Pages Structure



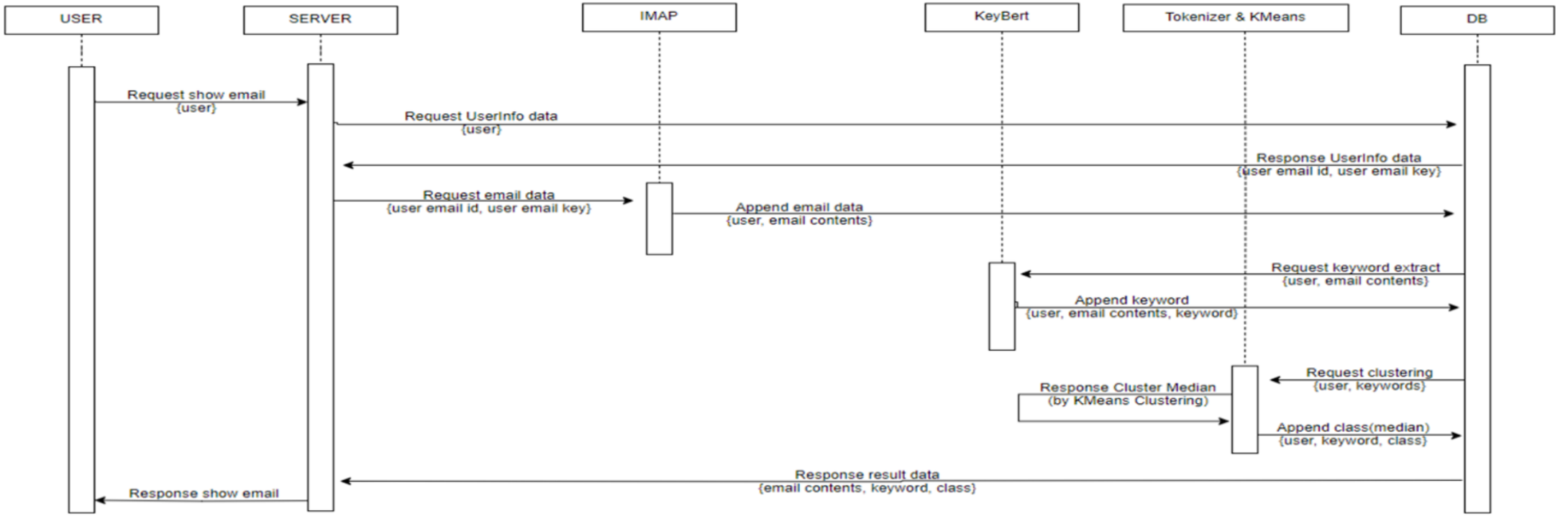
Routing Structure



02 Design & Implementation

2.3 Implementation Back End

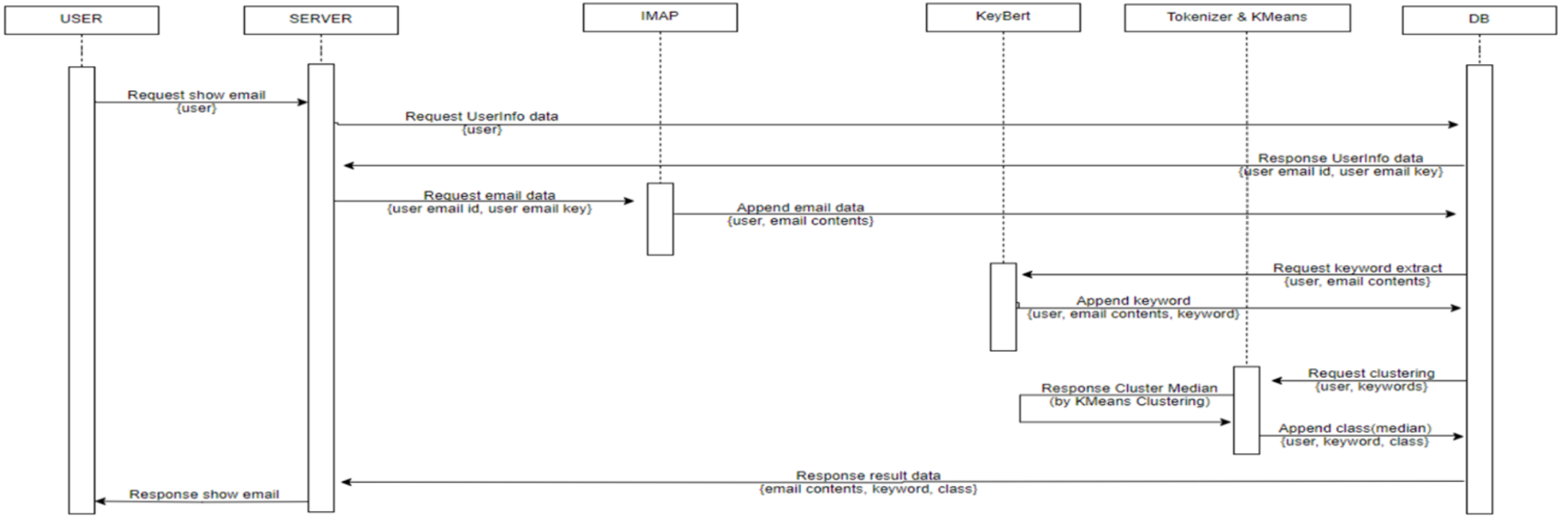
Email Inquiry



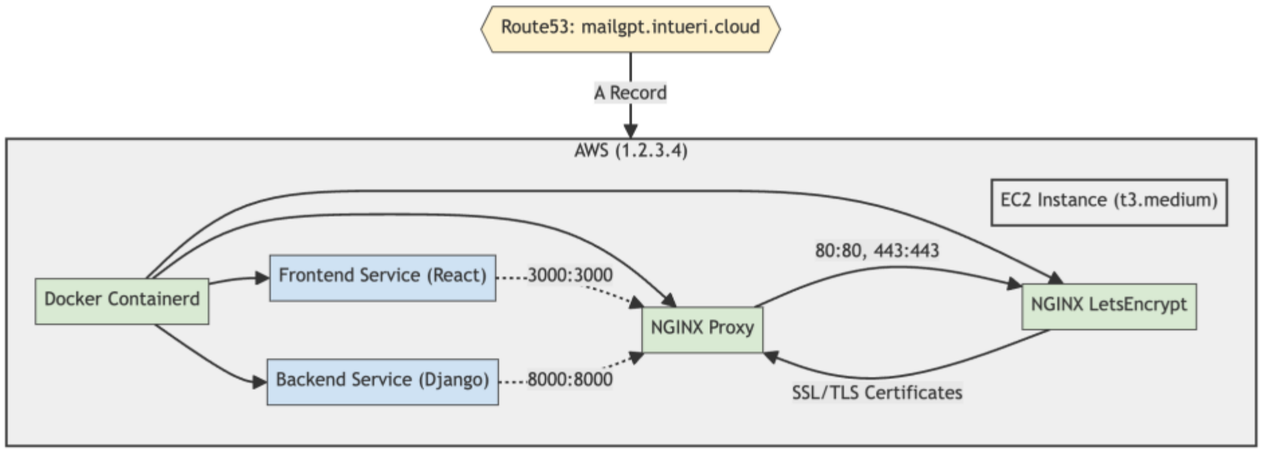
02 Design & Implementation

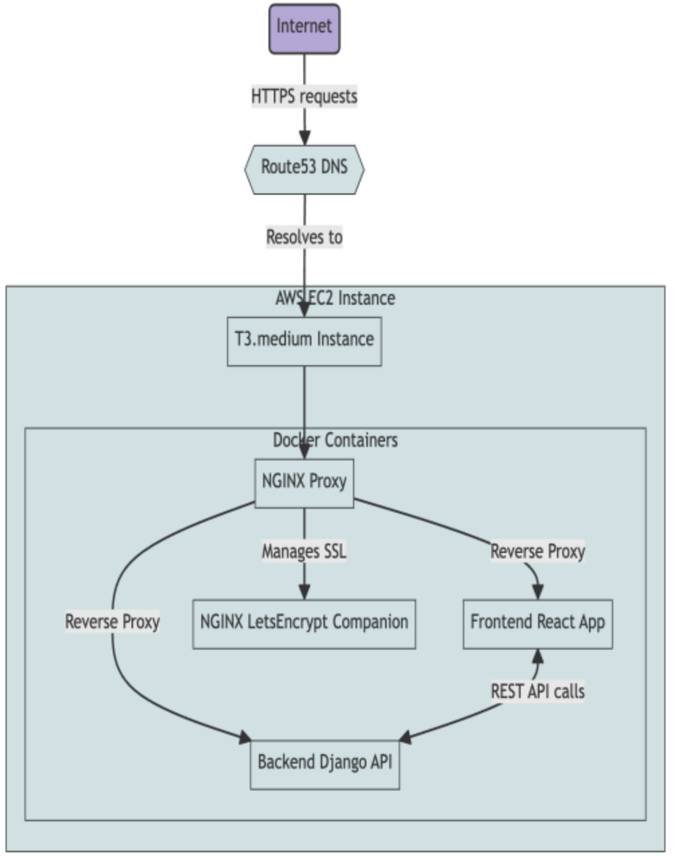
2.3 Implementation Back End

Email Seding



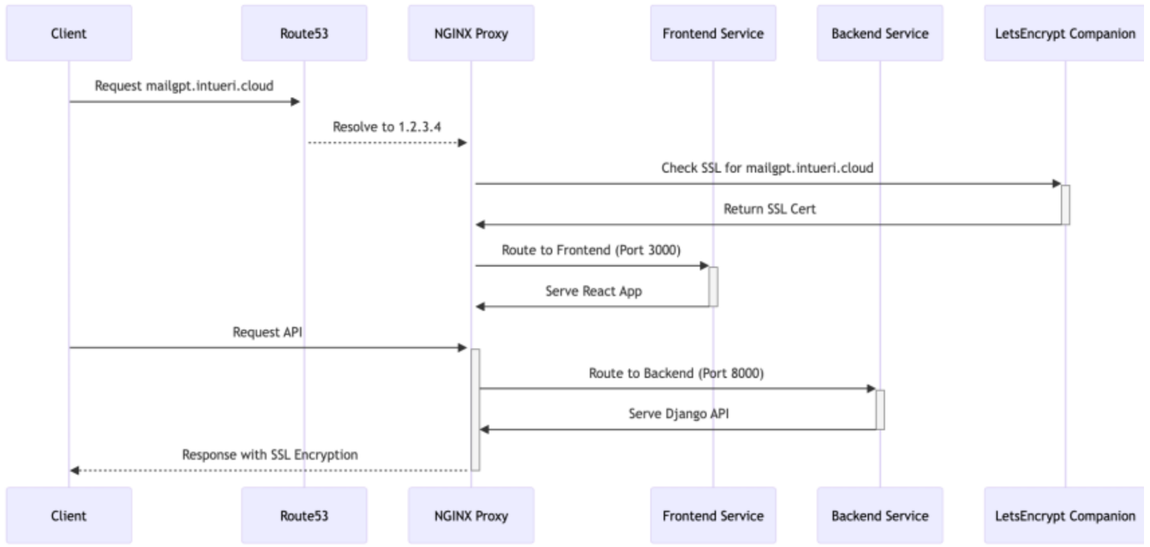
2.3 Implementation Infrastructure

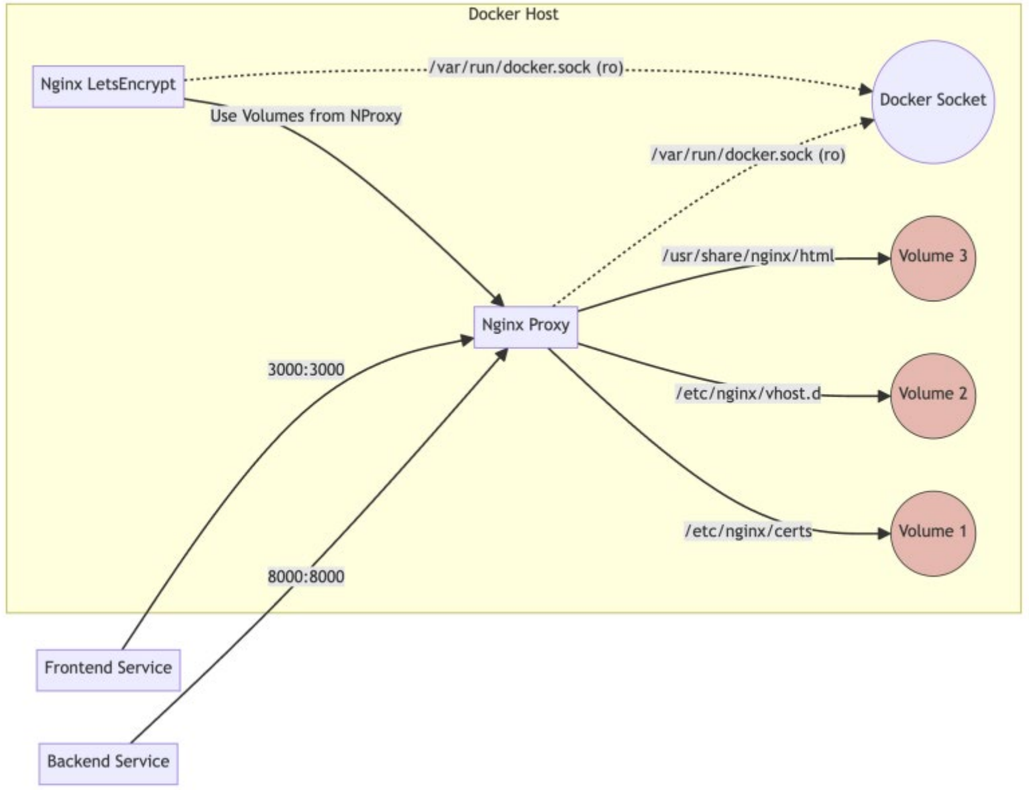




02 Design & Implementation

2.3 Implementation Infrastructure



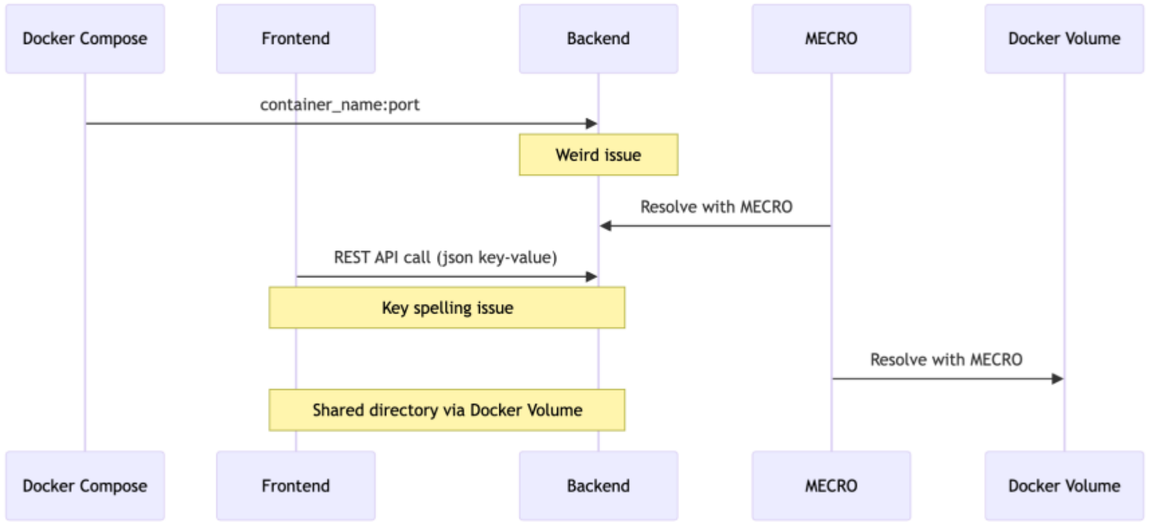


03 Challenges & Limitations

3.1 FE + BE Intagration
3.2 UI/UX + FE Integraion
3.3 DB & Auth
3.4 SSL/TLS & Proxy

03 Challenges & Limitations

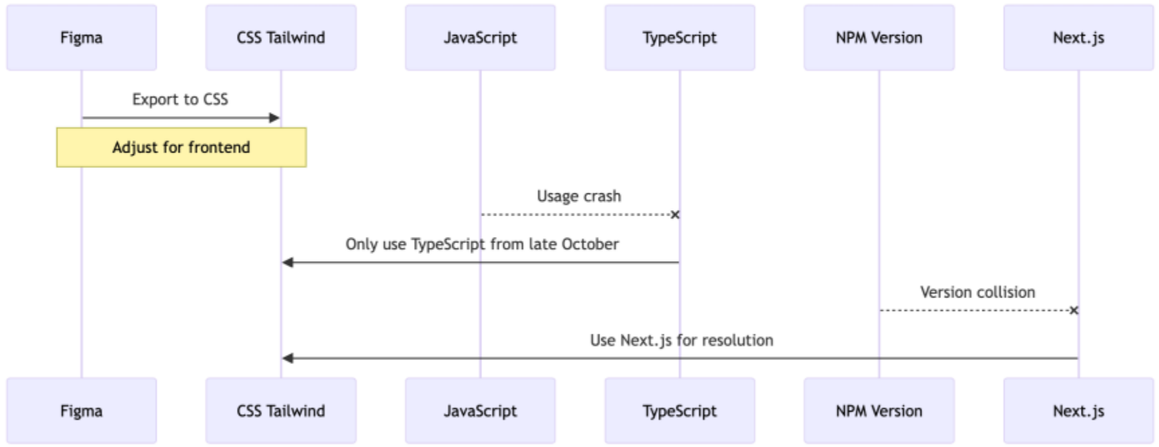
3.1 FE + BE Intagration

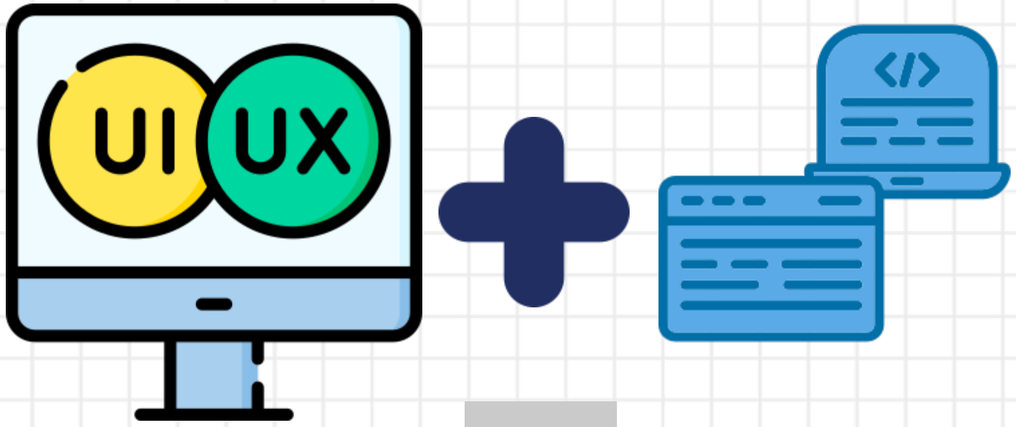


INTEGRITY

03 Challenges & Limitations

3.2 UI/UX + FE Integraion

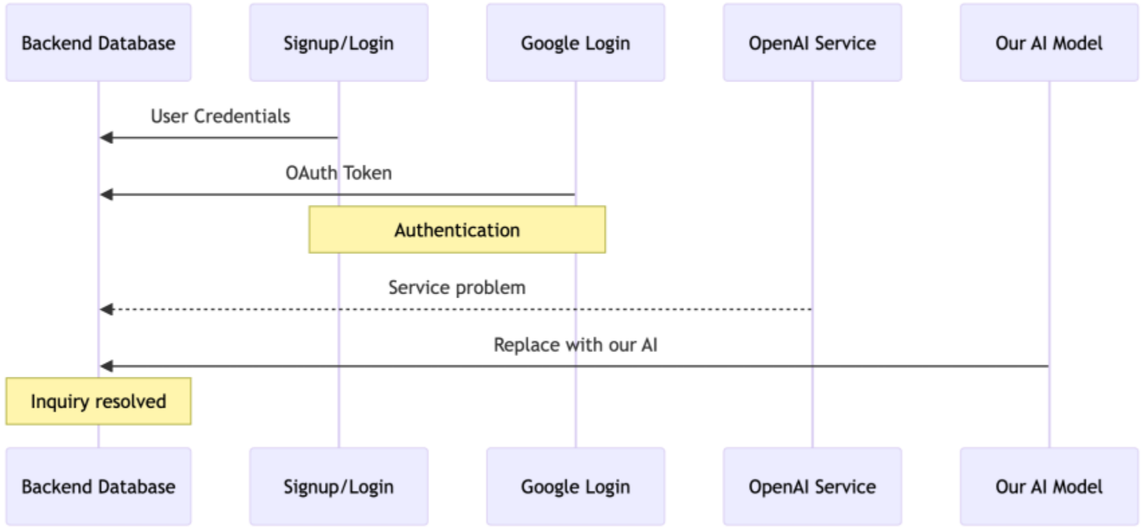


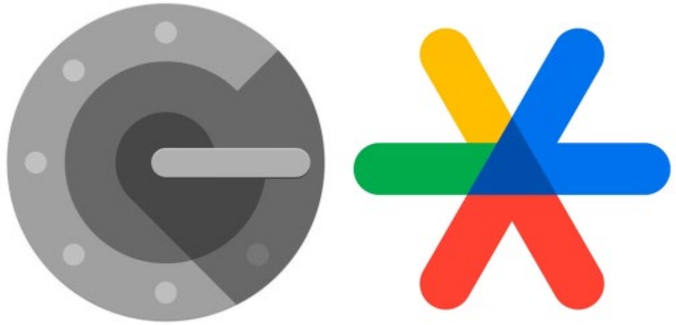


Tailwind CSS

03 Challenges & Limitations

3.3 DB & Auth

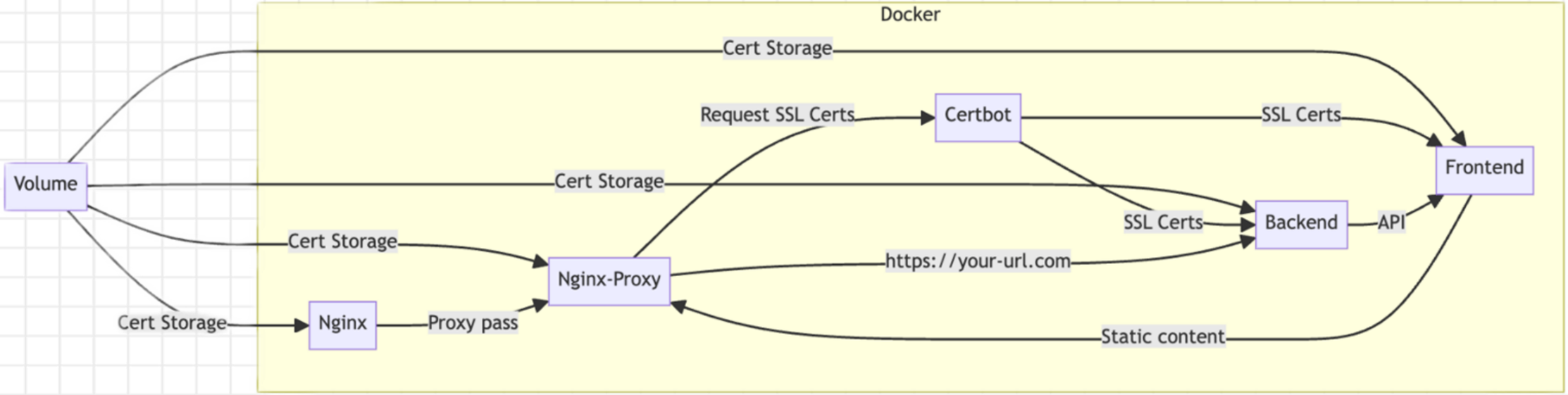


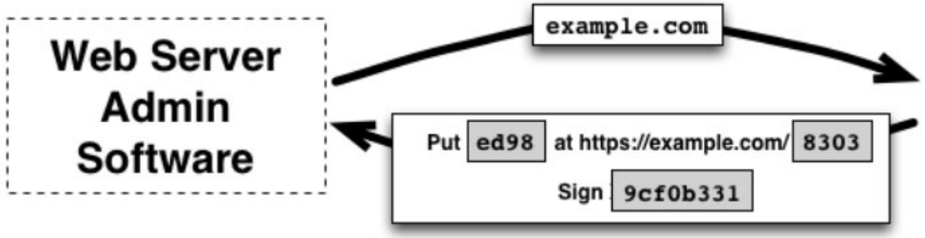


Firebase

03 Challenges & Limitations

3.4 SSL/TLS & Proxy



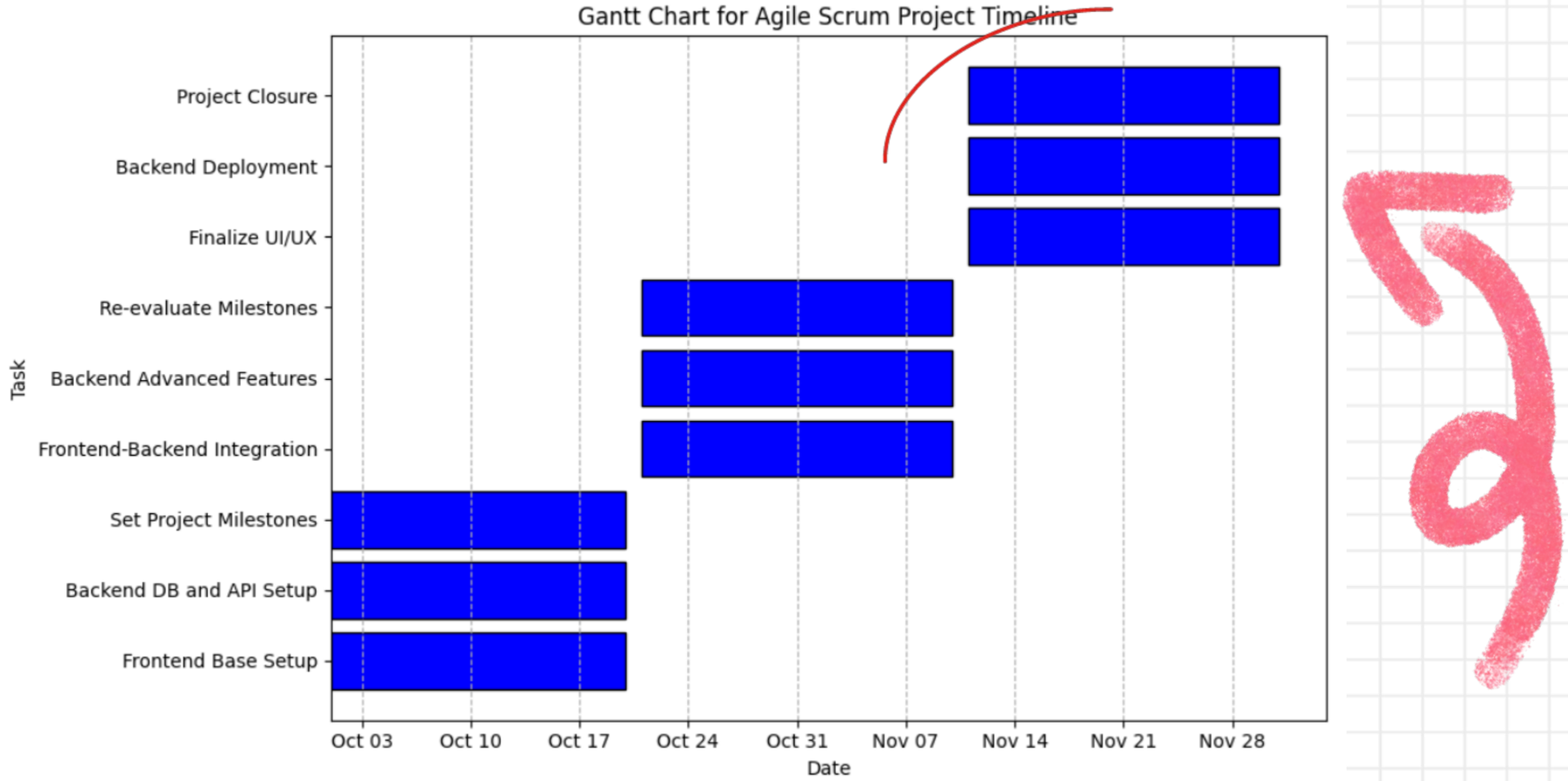


04 Conclusion

4.1 Further Milestone
4.2 Conclusion
4.3 Q&A

04 Conclusion

4.1 Further Milestone



Q & A

Thank You